

Date: Tue, 28 Jun 94 04:30:14 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #202
To: Ham-Ant

Ham-Ant Digest Tue, 28 Jun 94 Volume 94 : Issue 202

Today's Topics:

 Antenna books, JASIK, ARRL
 antenna tower erection
Followup : Static electricity on balloon antennas
 GAP Eagle Antenna -- Anyone Have Experiences?
 GPS group purchase shutdown (3 msgs)
 HF Mobile Antennas
 J-Poles and Baluns (2 msgs)
 need heathkit data
 Quadfiliar helix for GPS
 Switching Relays for Ladder Line?
 Thick Ethernet cable
 Thick Ethernet cable in place of RG cables ???

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 28 Jun 94 00:48:00 +0200
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!EU.net!news.eunet.fi!
gate.compart.fi!compart!heikki.partanen@network.ucsd.edu
Subject: Antenna books, JASIK, ARRL
To: ham-ant@ucsd.edu

I am interested to know if there is any possibility to find an
exemplar of Antenna Engineering Handbook from 1961 or later.
The Editor of the first edition is HENRY JASIK.
The book is published in New York, Toronto and London
by McGRAW-HILL BOOK COMPANY, INC.

I am interested in particularly of the chapters:
4, 5, 6, 7, 17, 18, 21, 22, 24, 30, 31, 33, 34 and 35.

Please, lett me know. I shall wait any positive advise.

Yours

Heikki

P.S. If somebody wants to contribute in finding a lose
sample of ARRL's Antenna Handbook, I also shall wait any answer
to my E-mail-address.

Heikki

P.P.S.

Is there better antenna handbook than ARRL antenna Handbook
to practical antenna building?

Please send Your answers to my e-mail-address:

heikki.partanen@compart.fi

or

henripar@freenet.hut.fi

Thanks and have a good summer.

Date: Mon, 27 Jun 1994 21:03:02
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!
europa.eng.gtefsd.com!sundog.tiac.net!news.sprintlink.net!nwnexus!olympus.net!
olympus.net!vaughnwt@network.ucsd.edu
Subject: antenna tower erection
To: ham-ant@ucsd.edu

>I just was listening on the 40 meter wavelength to a conversation
>about a friend of someone's who was affiliated in some manner
>(one-time section manager or something) to the ARRL. He was up on
>his tower working on something and somehow his safety belt got
>hung up. Don't ask me how, I guess its possible with what might
>be going on at the top of a tower....but the gentleman apparently
>couldn't get free of his situation and released his safety belt
>whereupon he fell freefalling to the top of his house and then
>bounced off the roof, onto the pavement on his driveway. The poor

>fellow is in a wheelchair and not expected to be able to walk
>around anymore. His friend on the radio said that it's too bad
>because the guy was very active.

>Just more to think about..even with a safety belt and years of
>experience climbing towers and being part of tower raising parties,
>all it takes is one fall.

>Definitely try to get help from some local guys before doing
>something like raising a tower!

>73's Tony

Also a very good argument for TWO safety belts. One of the two should be
connected at all times.

Bill KB7MRF

William Vaughn vaughnwt@olympus.net "Just plain Bill."

Date: Mon, 27 Jun 1994 16:48:12 GMT

From: ihnp4.ucsd.edu!swrinde!gatech!newsfeed.pitt.edu!gvls1!rossi@network.ucsd.edu

Subject: Followup : Static electricity on balloon antennas

To: ham-ant@ucsd.edu

A couple weeks ago there was an article posted here about using balloon
antennas for Field Day and how there was considerable static electricity
buildup on long wires. I figured that might be true for these 300-500 foot
wires that were being discussed but figured that it would be unlikely on
short wires. Well this past weekend (Field Day) I discovered that it can
happen on shorter wires too.

I was using a 67 ft half-wave wire vertical suspended from a kite. At one
point while I was setting up, I had the kite flying overhead with the
antenna wire just hanging from the kite string and the bottom end just
hovering a few feet above the FD site. There was a nice 15-20 MPH breeze.

While I was getting the kite in position, a few times I reached for the
wire to move it into position and each time I would get a very mild shock,
similar to what you get when you walk across the carpet in the winter and
touch a light switch. The first time I just thought it was odd but when
it happened a second time it suddenly clicked as to what was going on.

Once I got things set up, the wire was DC grounded through my tuner so
there was no further static problems.

Very interesting...

In article <2un223\$4go@nntpd2.cxo.dec.com> bonomo@specxn.enet.dec.com () writes:
>

>I am on vacation for the next two weeks.

....

> For those of you interested, that's about \$13,000
>sitting on my desk.

Uh oh... Wonder if he's going to Las Vegas? ;)

Jeff NH6IL

Date: Tue, 28 Jun 94 00:08:41 PDT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.onramp.net!
usenet@network.ucsd.edu
Subject: HF Mobile Antennas
To: ham-ant@ucsd.edu

Steve,

cheapest, best...Hamstick! \$15 or so for each band, but boy do they work.
Saturday evening mobile in Dallas, 14.162 UX2H0 59 sigs. We chatted for abt 10
minutes as I was driving Stemmons freeway. I ALWAYS get comments...90% of the
time when a station discovers that I am mobile they always comment on the great
mobile signal. No joking!

-G

Date: Mon, 27 Jun 1994 15:21:38 GMT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!csulb.edu!csus.edu!
netcom.com!vanwag@network.ucsd.edu
Subject: J-Poles and Baluns
To: ham-ant@ucsd.edu

A week or two ago, there was a post concerning using baluns with VHF/UHF
J-pole antennas. I need clarification and information as I would love to
improve the performance of my dual-band J-pole. Which type of balun do I
need (4:1, 1:1)? What is a good source for baluns for VHF/UHF freqs?

Thanks for the help,

George KE6EPC

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vanwag@netcom.com

Date: 27 Jun 1994 21:44:17 -0500
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!agate!howland.reston.ans.net!
gatech!udel!news2.sprintlink.net!news.sprintlink.net!bga.com!bga.com!
nobody@network.ucsd.edu
Subject: J-Poles and Baluns
To: ham-ant@ucsd.edu

In article <vanwagCs2Ao3.3Fq@netcom.com>,
George Van Wagner <vanwag@netcom.com> wrote:
>A week or two ago, there was a post concerning using baluns with VHF/UHF
>J-pole antennas. I need clarification and information as I would love to
>improve the performance of my dual-band J-pole. Which type of balun do I
>need (4:1, 1:1)? What is a good source for baluns for VHF/UHF freqs?

I just know what I have read ... an ARRL ant handbook from a
few years ago recommended a 4:1 balun (from 50 to ~200, noting that
jpoles are 200-600). The book showed a step up made out of coax....
short the braid at both ends of a electral halfwave of coax and
connect to the braid from the shield. Tie the feed center to
one end for one feed point, use the other center conductor for
the other feed point. This seems to work well for me (including
eliminating the rf on the coax). You can coil the halfwave
as desired.

milton
--
Milton Miller KB5TKF miltonm@bga.com

Date: 27 Jun 1994 20:18:24 GMT
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!rdw@network.ucsd.edu
Subject: need heathkit data
To: ham-ant@ucsd.edu

I am seeking a source for manuals for the following Heathkit products:
HW-16 Transceiver
HW-13 VFO

Does anyone have a source or possibly have these manuals for sale? Thanks
in advance for any help. KE6FDU

Date: Mon, 27 Jun 1994 11:09:00 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!newsserver.jvnc.net!yale.edu!

noc.near.net!usenet.elf.com!rpi!psinnntp!arrl.org!zlau@network.ucsd.edu
Subject: Quadfiliar helix for GPS
To: ham-ant@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: Most GPS remote antennas are more than just an antenna. They almost
: always include at least a preamp, and in some cases a complete down
: converter assembly. That's because the small flexible coaxes used
: have too great a loss at GPS frequencies to be overcome by just antenna
: gain alone. That's why the antennas are expensive, they actually duplicate
: circuitry in the receiver remotely at the antenna. Constructing such
: circuitry at home is a rather advanced amateur technique. Unless you're
: experienced at microwave construction, it's probably best to pay the
: money for the factory remote antenna.

One of the better descriptions of this antenna appears in Reflections
by Walt Maxwell. I'd say it really doesn't belong here, but apparently
this was one of Walt's specialties, so....

There are at least two MMICs designed to cover this frequency with
noise figures below 2 dB--a Tri Quint semiconductor part that might be
tough to get and the \$8 Hewlett Packard MGA 86576 GaAs MMIC. The HP part
has quite a bit of gain, over 20 dB, so it can overcome perhaps 30 ft or
so of RG-58/U coax loss. I'd probably go to RG-8 coax before trying
to cascade MMICs for longer coax runs--too much gain and you start
having to worry about interference and stability problems.

--

Zack Lau KH6CP/1 2 way QRP WAS
 8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

Date: Mon, 27 Jun 1994 14:00:31 GMT
From: mac_072.pppl.gov!user@princeton.edu
Subject: Switching Relays for Ladder Line?
To: ham-ant@ucsd.edu

Hi, gang!

As part of an effort to install a better antenna system, I would like
to build a box containing relays and terminals so that I can select several
antennas, each fed with 450 ohm ladder line.

Has anybody in the group built such a unit? Are double-pole relays
suitable for ladder line available anywhere? I can recall that in the
1950's I used a relay with a square ceramic base to switch my twin-lead

transmission line between my station transmitter and receiver, but I don't recall the model or number. All the commercial antenna switching units appear to be designed for coaxial cable.

Any tips or suggestions would be much appreciated!

73, George
NJ2P

Standard disclaimer: The above posting does not represent the views of Princeton University or the Plasma Physics Laboratory.

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George B. Christianson      | INTERNet: gchristianson@pppl.gov
Princeton University       | Phone: (609)-243-3270 FTS: 340-3270
Plasma Physics Laboratory  | Amateur Radio: NJ2P
P.O. Box 451               |
Princeton, NJ 08543, USA   |
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Date: Tue, 28 Jun 1994 05:59:37 GMT
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!convex!news.onramp.net!news.sprintlink.net!
mv!mv.mv.com!tetrault@network.ucsd.edu
Subject: Thick Ethernet cable
To: ham-ant@ucsd.edu
```

To: westgj@norand.com

In a recent msg, you wrote,

>
>I would like to point out that you can test unknown coax with a wattmeter, a
>dummy load and a VSWR bridge.
>
>If the loss is reasonable (check specs for "real" coax) and the VSWR is
>really low then you know that it can be used successfully for RF purposes.
>
>Remember to check it out at or above the frequency you intend to use it on.

>Advice for the day: Never walk away from gift coax.

Agreed. I use Thick Ethernet Coax for ALL my 2m 440m antennas, including a very successful satellite (modeB) station. It is 50ohm, low loss stuff. Blue jacket, 2 foil and 2 braid shields, foam inner and solid copper tinned conductor. Loss is less than 9913 but more than 3/4" helix.

NEVER overlook used Ethernet stuff.

73 Mark

* UniQWK v3.3a* The Windows Mail Reader

--

```
-----  
| Mark D. Tetrault      | tetrault@mv.mv.com      |  
| 6 Colonial Drive     | 1:132/169@fidonet.org  |  
| Pembroke, NH 03275   | n1men.ampr.org_44.52.7.8 |  
| (603) 485-5852       | Have a Nice Day!       |  
-----
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Date: 27 Jun 1994 12:06:06 -0500
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!vixen.cso.uiuc.edu!
newsrelay.iastate.edu!hobbes.physics.uiowa.edu!news.uiowa.edu!norand.com!
westgj@network.ucsd.edu
Subject: Thick Ethernet cable in place of RG cables ???
To: ham-ant@ucsd.edu

I would like to point out that you can test unknown coax with a wattmeter, a dummy load and a VSWR bridge.

If the loss is reasonable (check specs for "real" coax) and the VSWR is really low then you know that it can be used successfully for RF purposes.

Remember to check it out at or above the frequency you intend to use it on.

Some off brand coax I have found is a little hard to connectorize. Sometimes it doesn't have exactly standard dimensions. Usually, particularly for use at HF you can make something work.

Advice for the day: Never walk away from gift coax.

Guy
NOMMA
westgj@norand.com

Date: 27 Jun 1994 10:10:16 -0500
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!cs.utexas.edu!
gerald@cc.utexas.edu!doc.cc.utexas.edu!not-for-mail@network.ucsd.edu
To: ham-ant@ucsd.edu

References <2uh1bh\$1b4@news.u.washington.edu>, <S>,

<jtara.486.2E0C5C25@cts.com>s.e
Subject : Re: A Question on Yagi's.

Alec- Call the station Chief Engineer and ask him what type of polarization they are transmitting...Then get the ARRL antenna Book and wind a Helical antenna (guessing that it is going to be circular) using Wooden dowels as the Boom and standoffs. (you will need a calculator to do the dimensions) Go about..10 turns. This will look wild!...and operate great! Then...You Buy a radio shack Antenna preamp..bullet type..and put it at the antenna. Then...run RG-8x or better (belden 9913) for as short as possible to the receiver. You will be running the absolute optimum setup which should be able to routinely drag that signal in from 200 miles out. Your receiver better be decent..or else this will all be for naught. If you feel whimpy, just buy a commercial FM Yagi and do everything else I said. Oh yes, the Loop Yagi is not a circular antenna..I run a 55 element one at 87' with a Preamp into 7/8" heliax coax...Its like aiming a rifle! Good Luck-

Bob AA5PB

End of Ham-Ant Digest V94 #202
